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# Amber Alert Program Technology

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## Summary

Amber Alerts (also referred to as AMBER plans) use technology to disseminate information about child abductions in a timely manner. Research has found that most abducted children murdered by their kidnappers are killed within three hours of the abduction. Prompt response to child abductions is therefore deemed critical by many. Amber Alert plans are voluntary partnerships including law enforcement agencies, highway departments, and communications companies that provide emergency alerts. Technologies used for alerts include the Emergency Alert System (EAS), highway messages boards, telephone alert systems, the Internet, text messaging, and e-mail. Over 100 communities have Amber Alert programs and all 50 states have statewide alert plans. Because kidnappers can cross state lines with their victims, the Department of Justice will often be involved in responding to an abduction. For this and other reasons there is increased federal involvement in and support of Amber Alert plans. The 108th Congress sought ways to bolster state and local Amber Alert programs with federal aid and coordination. The PROTECT Act (S. 151, P.L. 108-21) strengthens the role of the federal government in supporting the Amber Alert System. H.R. 96 (Graves), introduced in the 109th Congress, would amend the PROTECT Act to specify that children eligible to be reported in an Amber Alert would include newborns.

Provisions in the National Intelligence Reform Act of 2004 (P.L. 108-458) require a pilot test of Amber Alert network technology for use in expanding the Emergency Alert System.

This report will be updated.

## How Amber Alerts Work

Amber Alerts[1] (also referred to as AMBER[2]) use technology to disseminate information about child abductions in a timely manner. Typically an Amber Alert is triggered for children under 18 who are believed by law enforcement officers to have been abducted (except in cases of parental abduction). Research has found that most abducted children murdered by their kidnappers are killed within three hours of the abduction. Prompt response to child abductions is therefore deemed critical by many. Law enforcement officers are encouraged to send out an alert if circumstances indicate that the child is in harm's way, if they have sufficient descriptive information about the child and/or the abductor for an alert, and if they believe that the immediate broadcast of an alert will help. When there is information about a vehicle used in an abduction, this information will usually be transmitted to highway messages boards, if that technology is in place. While each plan sets its own parameters, most follow guidelines set by the National Center for Missing and Exploited Children (NCMEC).

A typical Amber Alert, would include an Emergency Alert System (EAS) broadcast, alerts on highway message boards, and notifications to public service partners such as police, highway patrols and the field crews of public utilities. Also, several computer systems, such as Emergency Digital Information System (EDIS)[3] and TRAK (Technology to Recover Abandoned Kids), allow law enforcement agencies to share information and photos, if available. A number of counties and cities have Amber Alert programs that notify local residents using e-mail or telephone alert systems to aid in the recovery of abducted children. Alerts can also be sent by text messages to cell phones and other wireless devices. America Online, Inc. (AOL) has incorporated Amber Alerts into its Instant Messenger service for its registered users and also sends advisory e-mails to volunteers across the country who have asked to receive Amber Alerts. Cingular, Sprint Nextel, Verizon Wireless and T-Mobile are among the wireless service providers that participate in the Amber Alert network; subscribers can sign up for free text messages.[4] These systems have the advantage of targeting selected audiences by function or geographical location but may not be received in a timely manner; telephone alert systems, for example, can be blocked by call-screening technologies.

## Amber Alerts and All-Hazards Warnings

More than 15 states reportedly have launched or are preparing to launch Internet technology customized for Amber Alerts. It is hoped that this system might become the

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[1] Named after Amber Hagerman, kidnaped and murdered in 1996. The program and its context are discussed in CRS Report RL31655, *Missing and Exploited Children: Overview and Policy Concerns*, by Edith Fairman Cooper. Websites with additional information include [http://www.amberalertnow.org/] and the site of the National Center for Missing and Exploited Children, [http://www.ncmec.org]. All sites viewed December 21, 2005.

[2] For "America's Missing: Broadcast Emergency Response."

[3] The State of California has pioneered EDIS, designed, notably, to supplement EAS. EDIS provides digitized information through direct computer links and radio to public safety agencies, news media, and anyone with access to the Internet.

[4] For more information, see [http://www.wirelessfoundation.org]. Viewed January 12, 2006.

backbone for an expanded all-hazards warning system that would extend the reach of emergency alerts to all types of communications media.[5] Information about an Amber Alert is sent to a web portal and reconfigured for different types of broadcasting, including cell phones, pagers, e-mail, highway signs, TV news websites, and emergency communications center. The technology allows police officers to transmit details and photos through encrypted computer systems in patrol cars. Information, therefore, is disseminated both more quickly and more widely, maximizing the opportunity to find a missing child in the critical first three hours. The alert system is managed from a dedicated web portal that can be accessed by statewide or local systems. The software recognizes the reported locations of abductions and sends emergency messages to targeted areas.[6]

## Emergency Alert System (EAS)[7]

EAS sends emergency messages with the cooperation of broadcast radio and television and most cable television stations. Its most common use is for weather alerts. Recently, EAS technology has been put to use in the Amber Alert programs administered in some states and communities. To facilitate transmittal, EAS messages are classified by types of events, which are coded. These event codes speed the recognition and retransmittal process at broadcast stations. For example, a tornado warning is TOR, evacuation immediate is EVI, a civil emergency message is CEM. When a message is received at the broadcast station, it can be relayed to the public either as a program interruption or, for television, a "crawl" at the bottom of the TV screen. Although broadcaster participation is mandatory for national alerts, the participation of broadcast and cable stations in state and local emergency announcements is voluntary.

In the early stages of Amber Alert program development the CEM (civil emergency) event code was used for EAS messages. In February 2002, the Federal Communications Commission (FCC) added several new event and location codes for broadcast and cable stations to use; included was a Child Abduction Emergency (CAE) event code. Stations are not required to modify their equipment to recognize the new codes and many Amber Alerts are still coded as civil emergencies for transmission. New equipment installed by broadcast and cable stations after February 2004, however, must be able to receive and transmit the new codes.[8]

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[5] "Signing of 9/11 Bill to Bring the Emergency Warning System into the Digital Age; NASCIO will lead in developing a National All Alert System." National Association of Chief Information Officers Press Release, January 4, 2005 at [http://www.nascio.org/pressReleases/050104.cfm]. Viewed January 3, 2006.

[6] Additional information on the Amber Alert Portal at [http://amberalert.com/]. Viewed January 3, 2006.

[7] See CRS Report RL32527, *Emergency Communications: The Emergency Alert System (EAS) and All-Hazard Warnings*, by Linda K. Moore.

[8] FCC, *Report and Order*, Docket No. 01-66, released February 22, 2002.

## Legislative and Presidential Initiatives

Because kidnappers can cross state lines with their victims, the Department of Justice will often be involved in responding to an abduction. For this and other reasons there is increased federal involvement in and support of Amber Alert plans. However, critics are concerned about the possibility of false arrests, overzealous vigilantism, the release of sensitive information about minors, and confusion with homeland security alerts.

President George W. Bush and Congress have encouraged federal support for Amber Alerts.[9] In October 2002, the President requested that the Department of Justice establish standards for the issuing and dissemination of Amber Alerts. The Departments of Justice and Transportation were charged with the responsibility of improving the "network of AMBER plans," including "electronic billboards along the Nation's highways."[10] In January 2003, bills were introduced in the 108th Congress to require the Department of Justice, the FBI, the Department of Transportation, the FCC and other agencies to take steps to improve the effectiveness of Amber Alerts, including providing financial assistance through grants programs. Key features of all proposed legislation include requiring the Department of Transportation to expand the use of electronic message boards on highways and to develop other means of disseminating highway Amber Alerts and requiring the Department of Justice to develop programs for standardization and coordination and to establish grants for training, program development, equipment purchases and other needs.[11]

On April 30, 2003, the president signed into law the PROTECT Act (P.L. 108-21), formally establishing the federal government's role in the Amber Alert system. H.R. 96, introduced in the 109th Congress by Representative Sam Graves, would amend the PROTECT Act to specify that children eligible to be reported in an Amber Alert would include newborn infants.

The National Intelligence Reform Act of 2004 (P.L. 108-458) requires a pilot study using technology now being used for an Amber Alert network, to improve public warning systems regarding threats to homeland security. This is to be conducted by the Secretary of Homeland Security in consultation with the Attorney General, other federal agencies, the National Association of State Chief Information Officers, and other stakeholders in public safety systems.[12] Although the law does not specify the type of Amber Alert technology to be tested in the pilot, NASCIO has announced that it expects to take the lead in organizing the pilot and that it will test the Amber Alert Portal. In a press statement, Tom Jarrett, President of NASCIO is quoted as saying, "the state CIOs see this

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[9] "Bush Promotes 'Amber Alert' System," *Washington Post*, October 3, 2002.

[10] "Remarks at the White House Conference on Missing, Exploited and Runaway Children," Public Papers of the President, October 7, 2002.

[11] For additional information on Amber Alert, see CRS Report RL31655, *Missing and Exploited Children: Overview and Policy Concerns*, by Edith Fairman Cooper, and CRS Report RS21365 *The Missing Children's Assistance Act (MCAA): Appropriations and Reauthorizations*, by Edith Fairman Cooper.

[12] Pilot Study to Move Warning Systems Into the Modern Digital Age, Intelligence Reform and Terrorism Protection Act of 2004, Title VII, Sec. 7404.

as a clear migration path for moving public warning into the digital age using the AMBER Alert portal as the springboard."[13] According to testimony, the Federal Emergency Management Agency (FEMA) is seeking to finalize an agreement with NASCIO to incorporate an Amber Alert web portal pilot into other, broader-based pilots. These pilots are being coordinated through FEMA's Office of National Security Coordination as part of a program for an Integrated Public Alert and Warnings System (IPAWS).[14]

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[13] NASCIO Press Release, January 5, 2005. *Op. Cit.*

[14] Testimony of Reynold N. Hoover, Director, Office of National Security Coordination, FEMA, Department of Homeland Security for the Senate Committee on Commerce, Science and Transportation, Subcommittee on Disaster Prevention and Prediction,"All-Hazards Alert Systems," July 27, 2005.